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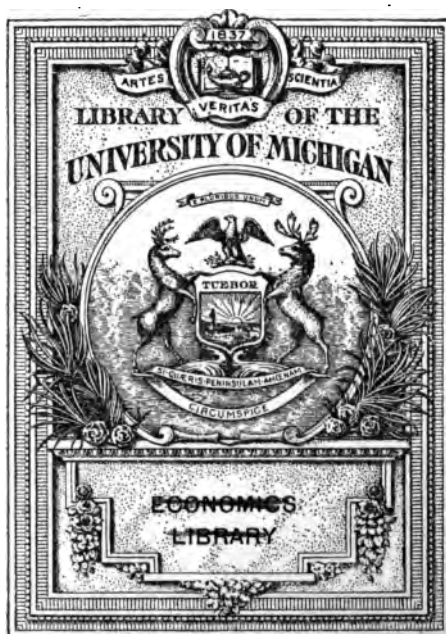
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THE FEDERAL VALUATION
OF THE
RAILROADS IN THE UNITED STATES

A REPORT SUBMITTED
BY THE
COMMITTEE ON RAILROAD SECURITIES
OF THE
INVESTMENT BANKERS ASSOCIATION OF AMERICA

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From -
~~Sam. kit.~~
8-30-1923

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FOREWORD

WHEN the Bureau of Valuation of the Interstate Commerce Commission completes the tentative report of the valuation of a carrier, mimeographed copies of the report are sent to the railway company, the governors and public service commissions of the states in which the property is located and to the Attorney-General of the United States. Additional copies of the reports are difficult to obtain owing to the limited number made. Holders of bonds and stocks of railway corporations are very deeply concerned with these valuation reports, which are not easily understood. For this reason, the Committee on Railroad Securities determined to present as its annual report for 1922 to the Investment Bankers Association a study of this subject.

In the accompanying text will be found a brief history of the Valuation Act, a description of the methods of finding values, an account of some of the differences as to principles and methods which have arisen between the carriers and the Bureau of Valuation, the uses to which the valuations may be put, and their probable effect on railway credit. In the supplement, tables are presented setting forth the valuations of such Class I roads as are now obtainable, the amount of additions and betterments made to these properties since the date of valuation, the cost of materials and supplies, the cash on hand, and the outstanding capitalizations as of December 31, 1921. To afford a ready means of comparison, the above figures are also presented on a per mile basis.

The hope is expressed that successor Committees on Railroad Securities may issue from time to time supplements giving the valuation figures for other carriers as they are released.

The present Committee on Railroad Securities wishes to express its great obligation to Messrs. H. H. Copeland & Son, 111 Broadway, New York City, who have generously drawn upon their study of "Railroad Valuation" to prepare the statistical tables given in the supplement, and to Mr. J. E. White, of the New York Bar, who has done much research work and prepared valuable memoranda for the use of the Committee.

THE FEDERAL VALUATION of the RAILROADS IN THE UNITED STATES

BRIEF HISTORY OF VALUATION ACT

In order to have a better appreciation of the reasons for the passage of the Valuation Act, we should first give some consideration to the fundamental principle of public transportation, on which the rights and duties of common carriers rest.

The state, i. e., the sovereign power, owns the public highways, and the transportation of goods and passengers thereon is a state function and logically should be performed by the state, but this service is delegated by the state to private individuals or corporations; hence both the right and the duty of the state to control this service.

The Federal Constitution empowers Congress "to regulate commerce with foreign nations and among the several states." The first Federal legislation dealing with the regulation of interstate commerce was the Interstate Commerce Act, approved February 4, 1887. Prior to that time, there had been great lack of uniformity among the carriers as to rates, practices and methods of dealing with the public, which gave rise to many State laws and regulations, such as the Granger Laws in the Middle Western States. There have been numerous amendments to the Interstate Commerce Act not connected with valuation, but we are not now concerned with these.

The Valuation Act, which is a part of the Interstate Commerce Act, was approved March 1, 1913. Some two or three years before that, Congress, under its authority to regulate interstate commerce, had had under consideration a bill to regulate the issuance of securities of railroad corporations engaged in interstate commerce, and authorized the appointment of a commission to investigate and report with reference thereto. The commission, headed by Arthur T. Hadley, then President of Yale

University, in its report, submitted in 1911, advised against such legislation pending a valuation of the property used in interstate commerce. It is probable that this report had much to do with causing the passage of the Valuation Act. At the time, it was expected that the work of valuation could be completed in from three to five years, at a cost of six to ten million dollars. One original estimate of the cost of valuing the railroads was as low as ten dollars a mile. In one case the Commission expended \$110 a mile in investigating original cost alone of a railroad constructed within the last twenty-five years. According to the report of the Presidents' Conference Committee, under date of January 20, 1922, the Class I carriers reporting to that Committee had expended \$54,120,957 up to June 30, 1921. The expenditures of the Commission's Bureau of Valuation to the same date were \$21,462,809, a total of \$75,583,766, and the end is not yet.

The members of the Senate and House chiefly responsible for the introduction of the bill to regulate the issuance of railroad securities and later the passage of the Valuation Act, were of the opinion that the roads as a whole were much overcapitalized, and they sought to show this as a result of valuation of the properties. The value to be fixed was also to be the basis for determination of the reasonableness of rates and the fairness of taxation, as well as other basic questions depending on value of the properties for their settlement.

REQUIREMENTS OF THE ACT

The Valuation Act directs the Commission to find and report the value of all the property owned or used by every common carrier subject to its jurisdiction. The Commission is directed to ascertain and report in detail, as to each piece of property owned or used by each such carrier for its purposes as a common carrier, "the original cost to date, the cost of reproduction new, the cost of reproduction less depreciation, and an analysis of the methods by which these several costs are obtained, and the reason for their differences, if any. The Commission shall in like manner ascertain and report separately other values, and elements of value, if any, of the property of such common carrier, and an analysis of the methods of valuation employed, and of the reasons

for any differences between any such value, and each of the foregoing cost values.

"Such investigation and report shall state in detail and separately from improvements the original cost of all lands, rights of way, and terminals owned or used for the purposes of a common carrier, and ascertained as of the time of dedication to public use, and the present value of the same, and separately the original and present cost of condemnation and damages or of purchase in excess of such original cost or present value.*

"Such investigation and report shall show separately the property held for purposes other than those of a common carrier, and the original cost and present value of the same, together with an analysis of the methods of valuation employed."

Upon the completion of valuation, the Commission is directed to keep itself informed of changes in the properties and to revise its valuations and report to Congress at the beginning of each regular session.

The valuations found by the Commission are submitted to the respective carriers as "Tentative Valuations", and the Act provides for thirty days within which to file a protest, and if no protest should be filed within that period the "Tentative Value" so found shall become the "Final Value". The Act provides that "All final valuations by the Commission and the classification thereof shall be published and shall be *prima facie* evidence of the value of the property in all proceedings under the Act to regulate commerce as of the date of the fixing thereof."

The particular requirements of this Act have proved to be a stupendous task to both the Commission and the railroads. Because of the seriousness and magnitude of the work, progress in outlining definite policies of procedure were exceedingly slow. Much time was spent in developing a method of procedure only to find that it must be abandoned. The Commission has been working on valuation of the railroads for nearly ten years and there still seems to be no well defined idea of what is to be deter-

* Congress recently passed an amendment to the Act, approved June 7, 1922 (H. R. 6043, *infra*),

(a) Excluding land from the "pieces of property" for which original cost to date, cost of reproduction new, and cost of reproduction less depreciation are to be ascertained.

(b) Limiting the report on land to a report of (1) its original cost "ascertained as of the time of dedication to public use," and (2) its "present value."

mined as value or how it is to be ascertained. Different theories of valuation have been developed, the most important of which may be referred to as:

(1) The "Reproduction" theory—the cost of reproducing the property in existence on the date of valuation determines the value.

(2) The "Investment" theory—the total cash sacrifice. In applying this theory, the amount taken out as profits is considered in connection with the amount put in, with the idea that the investor shall be allowed a reasonable return on what he has, in fact, contributed to the public use.

(3) The "Original Cost" theory—similar to the "Reproduction" theory, except that the original price, instead of the present price is applied.

(4) The "Market Value" theory—what the property could be sold for, and which is based on the earning capacity of the property.

METHODS OF FINDING VALUE

The methods of finding value prescribed by the Act follow in part certain elements of value mentioned in the opinion in *Smyth v. Ames*, *infra*, p. 24. The Bureau of Valuation makes an examination of the books and records of the carrier and its predecessors, if any, and endeavors to show the outlay in money for road, equipment, machinery, lands, etc., and embodies these in its report of tentative valuation as the original cost of construction, so far as it can be ascertained. The Bureau's field parties, for the purpose of reporting the cost of reproduction new, make a survey of the carrier property and as to such property, other than lands, report the estimated amount of work, materials in place, machinery, structures, plant and other parts, and amounts in dollars representing these items are shown by the Bureau as of the valuation date, which is June 30 of the year when the greater part of the valuation work for the particular carrier is done, using prices, however, as of June 30, 1914, for all valuations. To show cost of reproduction less depreciation, the Bureau uses different percentages of depreciation for the different items. The Bureau likewise endeavors to show the original cost of lands, rights of way and terminals at the time of their dedication to public use, as supported by the accounting records, their value as of the valuation date, referred to in the reports as the "present value", and, in the later valuation reports, the excess cost of acquisition. In all the valuation reports that we have seen, the Commission reports that "The original cost of condemnation and damages or

of purchase of lands owned and used, owned but not used, and used but not owned by the carrier for common-carrier purposes, in excess of the original cost of such lands, can not be ascertained."

The carriers have done much, however, to co-operate with the Commission in this work. A committee of railroad presidents (the Conference Committee above mentioned) represents the carriers in looking after this work and many conferences have been held with the Division of Valuation to consider the principles and countless details connected with the work. The legal features of the work are of great importance, as the amount of detail and the expense involved require that care should be taken to see that the work is done in conformity with the requirements of the Act. It was well that this work has been under the supervision of counsel for both the Government and the carriers; otherwise, as is easily conceivable, the differences would probably have been much more serious. The carriers have prepared elaborate maps and exhaustive engineering and other data and have aided the Commission's field parties by sending members of their engineering departments to accompany them and point out the railroad properties, without which the Bureau of Valuation would have been practically unable to proceed.

DIFFICULTIES IN FINDING VALUES

As the Commission progressed in its valuation work its methods met with increasing disfavor on the part of the carriers, one of the main points of difference being that the Commission has appeared to be working for a valuation, as it is stated, for "rate-making" purposes, and more or less arbitrary, while the railroads have contended that the valuation contemplated by the Act is the commercial, or exchange, value. Although no definite method of finding value is laid down in the Act, it defines certain elements of value that are to be determined and treated as evidence of value. In its tentative valuations, the Commission, so far as possible, seems to have reported "Original cost to date," "Additions and Betterments to date of valuation," "Cost of reproduction new," and "Cost of reproduction less depreciation," but the carriers maintain that it has not reported analyses as required by the Act as to how it arrived at the results reported, nor analyses

of what is covered by the expression, "Other values and elements of value" used in its reports. Without analyses of how it arrived at the amounts reported as "Cost of reproduction new," "Cost of reproduction less depreciation" and the other cost values, or what it has allowed for "Other values and elements of value," the carriers could hardly be expected to receive the Commission's reports without protest.

The question of depreciation, for example, is a serious one. Not so much, perhaps, with rolling stock, as experience has shown about how long a locomotive or car will last with ordinary usage. When purchased, such equipment is charged always to capital account and a depreciation reserve is set up sufficient to retire it at the end of its usefulness. The cost of such new equipment is never charged to maintenance. But with rails, ties and other like parts, which are charged to operating expenses, it is entirely different. In many instances, the actual work of valuation in the field has been done in a period considerably later than the valuation date reported. How, then, can depreciation for a date so remote be shown, particularly in the case of property that may have even disappeared? Dealing with depreciation theories as to such parts as these presupposes want of maintenance. To state to what extent allowance should be made for want of maintenance, even approximately, is probably out of the question. Total want of maintenance ultimately spells no value; value disappears. Instead of assuming depreciation to exist and proceeding on the theory that the physical property constantly lessens in value, the actual facts are that the average well managed railroad is not only constantly maintained but even improved. Heavier and better material is substituted for that taken out. In his "Memorandum upon Final Value," the late Director Prouty admits that, "It can safely be assumed that maintenance takes care of depreciation."

Eliminating the question of deferred maintenance, which though it does occur at times is, however, only a temporary condition and in the end is made up, it may safely be stated that the property, instead of growing less in value, is constantly increasing in value. It is a well known fact that every leading railroad in the country is a better railroad today than ever before. Its constituent parts are renewed as soon as they cease to serve their purpose as well as new ones, and they serve their purpose

as well one time as another as long as they last. This question of depreciation has been one of the points of contention between the Commission and the carriers.

DIFFICULTY OF FINDING ORIGINAL COST

Another difficult point has been the attempt of the Commission to find the so-called "Original cost to date," as stipulated by the Act. With some of the smaller lines of comparatively recent construction, this has not been a difficult matter, as in the case of the Winston-Salem Southbound. But in most cases, especially with the older and larger systems, many of the early records have long ago vanished—have been lost, destroyed by fire or otherwise—and to state original cost in such circumstances has been quite impossible.

Even though original cost could be fully and accurately ascertained, it is not important as an element of value. As was said by the Supreme Court in the *Minnesota Rate Cases* (p. 454):* "It is clear that in ascertaining the present value we are not limited to the consideration of the amount of the actual investment. If that has been reckless or improvident, losses may be sustained which the community does not underwrite. As the company may not be protected in its actual investment, if the value of its property be plainly less, so the making of a just return for the use of the property involves the recognition of its fair value if it be more than its cost. *The property is held in private ownership and it is that property, and not the original cost of it, of which the owner may not be deprived without due process of law* (italics ours). But still it is property employed in a public calling, subject to governmental regulation and while under the guise of such regulation it may not be confiscated, it is equally true that there is attached to its use the condition that charges to the public shall not be unreasonable."

As a practical illustration of this difficulty of finding value, we paraphrase from the report of the Hearings before the Committee on Interstate and Foreign Commerce of the House on H. R. 6043, pp. 97-9.

* *Infra*, page 16.

Testimony was being presented concerning the question of whether or not any allowance for excess cost of acquisition of lands was made by the Commission in its valuation reports, and it was stated that the Commission, prior to the decision of the Supreme Court in the Kansas City Southern case, had served 56 tentative valuations. None of these had any statement as to the excess cost of acquisition nor did any of them contain any statement of the figure of final value of the entire property. Subsequent to the decision, the Commission issued 56 supplemental tentative valuations, in which there were stated the excess cost of acquisition of lands and a tentative figure of final value. Nothing had been changed in the way of amounts; that is, the amounts fixed in the tentative valuations served by the Commission were not changed in any way by the supplemental reports. The supplemental tentative valuations merely added to the original tentative valuation a statement in regard to the excess cost of acquisition of land and a tentative figure of final value of the entire property.

In the original tentative valuations the Commission announced that it would later report a figure of final value, but what was called a tentative valuation originally included nothing except the various cost figures called for by the Valuation Act. The Commission makes a blanket assertion that it has considered everything the law required and then states its figure of value. It does not state to what elements it attached weight and to what elements it did not attach weight. It was the opinion of the witness that the Commission did not comply with the provisions of the Act requiring it to state an analysis of the methods employed. What the Commission reports as to the present value of land is the value of the adjacent and adjoining land per acre applied to the carrier lands computed in acres.

The witness stated that so far as he had examined the tentative valuations reported, taking the figure of cost of reproduction less depreciation, the figure representing the present value of the lands, the figure representing the excess cost of acquisition of lands, the figure representing working capital, materials and supplies, and adding them together produced a total in every case greater than the figure of value reported by the Commission. It was his belief that if the Commission had considered depreciation and going-concern value and had allowed anything for these ele-

ments, it had not allowed anything for the excess cost of acquisition of land.

The witness then refers to the case of the Winston-Salem Southbound Railroad, a small railroad in North Carolina, only about 90 miles long, which was built by the Atlantic Coast Line and the Norfolk & Western as a connecting link between them. The line was built but had not been entirely completed on the date of its valuation. There was a fairly complete report, however, of what the road actually cost, so that comparison could be made between the original cost and cost of reproduction. The Commission reported this road as having a value of \$5,850,000 as its final value under the Valuation Act after considering all the various elements. The witness stated that taking the figure of cost of reproduction less depreciation, the figure reported for the present value of land, the figure reported for working capital, materials and supplies, the figure reported for excess cost of acquisition of land, and adding them together made a total of \$6,114,086, while the valuation reported was \$5,850,000. In the case of this road, the Commission reported its original cost as something less than the final value figure reported. The facts were, that to build this road the corporation had issued \$5,000,000 of 4% long term bonds, had borrowed \$1,120,000 for which it issued stock subsequent to the date of valuation, and also had issued stock paid in for cash to the amount of \$125,000, making \$6,245,000 that the railroad cost. The figure reported as value could not have included anything for the excess cost of acquisition of land. The witness went on to say that what is true of that property is true of all the valuations that he had examined. The actual investment, therefore, of the Winston-Salem Southbound is about 6¾% in excess of the value placed upon the property by the Commission.

DIFFICULTIES CONCERNING LAND VALUES

Another point on which there has been serious division has been the question of land values. Before the Act was amended, as above mentioned on page 9 (foot note), the Commission was directed not only to ascertain and report the true present value of carrier lands, but also to report separately the "present cost of condemnation and damages or of purchase in excess of such original cost or

present value." The Commission interpreted the term "present value" so used to mean "acreage value," which it arrived at by ascertaining the number of acres of land owned or used for common carrier purposes and multiplying this acreage by a market value determined from the present value of similar adjacent and adjoining lands. In its valuation report on the Texas Midland, the Commission said: "Nothing is included for the expense of acquisition, nor for severance damages, nor for interest during construction." The Commission proceeded in this manner to ascertain the acreage value of adjacent and adjoining lands and to apply the same to the carrier lands on an acreage basis, reporting the same as the "present value" of the carrier lands.

The carriers were much dissatisfied with this method of finding and reporting land values and protested that it was not a compliance with the Act. One of the most important cases under protest was that of the Kansas City Southern. When the Commission first found the tentative valuation of that property, it refused to find the cost of reproduction of the Company's lands, saying in substance that the reproduction cost of the lands could not be ascertained, and hence it was useless to submit testimony upon that issue, basing its conclusion upon its interpretation of the *Minnesota Rate Cases* (1913), 230 U. S. 352. The Kansas City Southern disputed the conclusions of the Commission and pointed out that the Commission had already determined the present value of adjacent lands. The importance to the Kansas City Southern is apparent from the fact that the Commission's tentative valuation of the lands was \$4,478,267, while the Company contended that upon the valuation date the cost of the lands by purchase or condemnation was not less than \$14,997,940, a difference of approximately \$10,000,000 between the figures based on the valuation method of the Commission and that of the carrier.

The contention of the Kansas City Southern in its mandamus case was upheld by the Supreme Court, and following such decision the Commission ascertained and reported the "present costs of condemnation and damages or of purchase" in excess of "present value", describing it as "the excess cost of the carrier lands."

Valuations served prior to the amendment are so prepared as to enable carriers to support by the Commission's own figures any claim that the actual value of their lands is not less than what

it would cost on the date of valuation to acquire them. Valuations prepared and served subsequently to the amendment do not include any statement of "excess cost of acquisition of the carrier lands." Only "present value" is reported and it is limited to the acreage value of adjacent and adjoining lands.

It is probable that this change in the tentative valuation reports of land values will lead to further protests on the part of the carriers and that the carriers will be prepared to support such protests through the preparation of correct estimates of the costs of acquisition of their carrier lands so that they may be prepared to establish the true value of such lands.

There has been some discussion as to whether the carriers own their property in fee and whether the value is affected by the title possessed. It has even been proposed that the Valuation Act be amended so as to provide that the Commission shall ascertain what may be the title of the carrier to each separate parcel of real property held, and be governed accordingly in its report of values. Apart from the enormous amount of work and expense that this would entail, it ought to be obvious, from the fact that established railroads for all practical purposes hold property in perpetuity, that whatever be the title, it cannot affect the value nor the protection of that value under the Constitution. Private capital invested in railroad property does not lose its private character, and the property in which such private capital is invested still retains its character as private property. The state could hardly expect private capital to embark in railroad enterprise if the persons who devoted their funds to this purpose were required to surrender their title to the property so purchased. The courts, all the way up to the Supreme Court of the United States, deal with railroad property as private property, so that all such discussion may be dismissed as immaterial.

GOING-CONCERN VALUE

The carriers insist that going-concern value is included in the language of the Act: "Other values and elements of value" and the late Director of the Bureau of Valuation, C. A. Prouty, agrees with them up to a certain point.

In his "Memorandum upon Final Value" Judge Prouty said: "The Commission must also add something on account of going-

concern value. After the decision in the Des Moines Gas Case, it was assumed in many quarters that nothing need be added for going value in a rate case, but the language of that case was squarely opposed to this interpretation, and still later in the Denver Water Case, the court expressly held that an addition for going-concern value should be made."

In this Memorandum going-concern value is analyzed to contain three elements designated as commercial, early losses and structural. The first of these, commercial, arises out of the successful operation of a property. Experience has shown that it is a profitable business enterprise. Commercial going-concern value therefore depends upon the earnings of a railroad, past and prospective, and Judge Prouty recommends that the Commission disregard it in finding a rate-making value because what the Commission is seeking is the value of the property; not the value of the business.

The second kind of going-concern value is associated with early losses in the operation of a property. Many railroads during the first years of their operation fail to earn a fair return on the investment and unless the right of owners to recoup their losses in later years of prosperity is recognized, private capital will not embark in the construction of railroads. At the same time, unless a carrier justifies its construction within a reasonable period and is able to make up the losses which it sustained in the early years of its operation, these losses cannot be taken into consideration. For this reason Judge Prouty argued that there should be a definite period, differing perhaps for different carriers, within which the losses might be recouped and that unless the loss had been made good within that period, the value of the property should not be increased on that account.

Structural going-concern value is defined by the Director in his "Memorandum" as follows:

"Before a railroad can be successfully run, its operating organization must be built up. This is not accomplished by simply hiring so many people. The relation between these people must be established. A working organization must be developed. The same people, after this organization is perfected, will transact much more business and in a much more satisfactory way than at the beginning.

"It is also necessary that the operators of these railroads become familiar with the property. Its weak points and its strong points must be developed. What traffic it can handle to advantage, both through and local, and how that traffic is to be obtained and how handled must be thought out. No organization can economically handle the business of a railroad until that railroad is thoroughly understood.

"Finally and perhaps principally, this railroad must establish itself with the public. People must learn that there is such a railroad, must come to know the extent to which it can be used, must have confidence in its ability to transact the business which is committed to it."

This kind of going-concern value, Judge Prouty believed, attaches to the property itself and is the same whether the exchange value of the property is great or small and therefore should be added to the depreciated value of the property in determining final value. In his opinion appreciation plus going-concern value is equivalent to about 7½% of the cost of reproducing a road, including in such costs general expenditures, but excluding land.

MEANING OF "TENTATIVE" AND "FINAL" VALUE AS USED IN THE VALUATION REPORTS

There appears to be considerable confusion as a result of the manner in which these terms have been used by the Commission in its valuation reports, and their use has been misleading. The Act provides for the service upon the carriers of a tentative valuation and makes further provision that such tentative valuation shall become the final valuation either after hearing or by default. The valuation reports served by the Commission contain a paragraph reading substantially as follows:

"Final value. After careful consideration of all the facts contained herein, including appreciation, depreciation, going-concern value, and working capital, including material and supplies, and all other matters which appear to have a bearing upon the values here reported, the values, as that term is used in the Interstate Commerce Act, of the property of the carrier owned and used, used but not owned, and owned but not used, devoted to common-carrier purposes, are found to be as follows:"

The use by the Commission of the term "Final value" thus appears to be for the purpose of indicating that the amounts then

stated are the complete figures of valuation of the property as found by the Commission. It does not mean the final value of the property as that term is used in the Act, for the valuation reports as served, both in the notice and order, distinctly state that they are tentative valuations. They do not become "Final" valuations until accepted by the carrier either without protest or after hearing, or unless the carrier should permit the valuation to become final by default as provided by the Act.

WHAT PROPERTY OF THE RAILROADS IS VALUED

Although the Valuation Act provides for valuation of all property of the carriers, the property on the value of which the "fair return" is based, as provided both by the Valuation Act and the Transportation Act, 1920, is the property used in the service of the public.

The Valuation Reports state non-carrier property separately, as lands held for purposes other than those of a common carrier, structures of like character, investments in other companies, securities owned, and other property not used for common carrier purposes.

The Reports state the original cost of such lands as supported by the accounting records, or that such original cost cannot be ascertained, and then state a sum as the present value of such lands; non-carrier structures are given a present value; both the par value and the book value of investments in other companies are stated; and the value of securities owned is stated in the same way. But these values are not included in the amounts shown as the value of property used for common carrier purposes.

There is great difference among the carriers as to the amount and value of their non-carrier property, which, of course, is represented in the outstanding capitalization in the same manner as carrier property. It is for this reason that a carrier's capitalization may not closely represent the value of its carrier property; hence the market value of stocks and bonds has been given little or no consideration in the Valuation Reports. When a carrier owns little or no non-carrier property, however, it would seem that the market value of its stocks and bonds is entitled to consideration.

Whatever value may be placed by the Commission on non-carrier property, it should have no bearing on the Commission's estimate of value of carrier property.

RESULT OF COMPLETION OF VALUATION

The Act provides that the valuations found by the Commission shall be "*prima facie* evidence of the value of the property in all proceedings under the Act." It is to be borne in mind, therefore, that the "Final Value" found and reported by the Commission, even though accepted without protest by the carrier, is not necessarily the last word. It must still stand the test of judicial inquiry, if need be. As such *prima facie* evidence it would, of course, carry great weight in any hearing, but the carriers are not estopped from introducing other evidence in their own behalf. The Commission has no power to fix a "Final Value" of itself and compel its acceptance by the carriers, for they will still have the right to go into court and attack these valuations. The Commission is a body with powers delegated by a legislative body and its acts are, therefore, subject to judicial review.

"The perpetuity of our institutions and the liberty enjoyed under them depend in no small degree upon the power given the judiciary to declare null and void all legislation clearly repugnant to the supreme law of the land." (*Smyth v. Ames.*)*

KEEPING VALUATIONS UP TO DATE

It has often been said that even before valuation has been completed it would be out of date and of little or no use, and it is quite apparent that unless some method can be devised to keep the valuations up to date, they will soon be of little or no account. To add to the value when found actual expenditures in dollars and cents for additions and betterments and to deduct the actual cost of retirements is only partly a solution. The actual quantities would not appear and in time the valuation would be largely an investment valuation, corresponding to the carrier's property investment account, and not a structural or inventory valuation. To assemble these units of added and retired quantities after the

* *Infra*, page 24.

lapse of several years and apply prices so as to bring the valuation down to date would be a huge task. The late Director Prouty said that he did not believe it would ever be done.

There are other difficulties. Whatever may be the outcome of the controversy in regard to depreciation, allowing for additions and betterments and for retirements does not provide for obsolescence of buildings, bridges, and other parts that become outgrown and must be discarded though still as serviceable up to their capacity as when first put in use, nor does this allowance take into consideration changes that may occur in the value of lands. It seems apparent that only reappraisal of these parts of the property would provide for such changes.

FIXING RATES

Probably only those with long and close familiarity with the making of rates have a working understanding of this exceedingly complex question, with its problems of competition, differentials and other difficulties peculiar thereto. To state fixed sums as the value of the several railroad properties and then to prescribe rates that shall yield a fair return on the total of such sums for the respective groups defined by the Commission, has, of course, the sanction of authority, but it is only a bench mark. The fixing of rates is a practical, business matter of adjustment and compromise. It is easily conceivable that a road or all the roads of a group or of the entire country may be honestly capitalized and honestly and efficiently managed, and still not be able to charge rates that will yield a fair return on the fair value of the property. In the rate increase of 1920, *Ex parte 74*, the Commission fixed a tentative value for the roads by groups aggregating \$18,900,000,000, which was probably well within the fair value of the properties, and then made a sincere attempt to adjust rates to yield net operating income of 6% on that amount; with what result? For the year 1921, the Class I roads in the Eastern Group earned 3.3%, in the Southern, 2.6% and in the Western, 3.5%, with an average percentage of 3.31 for these roads as a whole (*Reduced Rates, 1922*, 68 I. C. C., 676,687). The Commission could not, nor could anyone else, foresee the extent of the business depression that set in, in the latter part of 1920, a short time after the effective date of the rate increase in the latter part of August. But suppose

the Commission had foreseen it exactly. What could it have done? Placed the rates still higher, or fixed them at a lower level with the hope of lessening trade depression? Either course would have been futile. The result of this depression has shown that no matter what valuation may be finally placed on the carriers and no matter what may be the rates based thereon, however fair and true such valuation may be and however able and sincere may be the attempt to adjust the rates to such valuation, the actual returns to the carriers will in the main always be governed by the same inexorable, economic laws that affect any other commercial enterprise.

As with every question that is not well understood, this rate problem has its peculiar effects on the general public in various ways. During recent months, but before the rate reduction by the Commission, effective July 1, 1922, the shippers in general insisted that the high rates retarded business, and owing to this attitude of the shippers the rates probably did so to some extent, although it was practically denied by the railroads' executives, who, however, admitted that rates were too high in many cases and should be reduced as soon as practicable. The railroad managers do not like high rates. It is safe to say that not within the past twenty years have the railroads made application for rate increases for any other reason than that they were confronted with the necessity for raising additional needed revenue to meet their legitimate charges. They know only too well the effect of rate increases on business and industries along their lines. Moreover, every increase of this kind is made the excuse to exact higher prices, whether there may be any real justification for it or not. Total operating revenues for 1921 were \$5,563,232,215. Reduced by 10% they would have been less by \$556,000,000. If the cost of living were lowered to the entire extent of this saving, it would have meant \$5 for each of us. Obviously this would not have gone a great way to reduce our living expenses. Were it not for the attitude of the public, particularly the shippers, it would not have the slightest effect on business. When business is good little attention is paid to rates.

Part III of the Report of the Joint Commission of Agricultural Inquiry of the Senate and House, recently published, deals with Transportation. As evidence of our contention that the fix-

ing of rates is a practical matter, the Joint Commission, after a searching inquiry and without awaiting the results of Federal Valuation, in its summary recommends:

"1. That the transportation rates on many commodities, more especially the products of agriculture, bear a disproportionate relation to the prices of such commodities; that there should be immediate reductions in transportation rates applied to farm products and other basic commodities; and that reductions in rates upon the articles of higher value, or upon tonnage moving upon so-called 'class rates,' are not warranted, while the rates upon agricultural products and other basic commodities remain at their existing levels; that greater consideration should be given in the future by public rate-making authorities and by the railroads in the making of transportation rates to the relative value of commodities and existing and prospective economic conditions.

"2. That the pyramided per cent advances in rates which have been authorized by the Interstate Commerce Commission or made by the United States Railroad Administration caused the dislocation of long-standing rate relationships between rates upon agricultural and industrial products between competitive enterprises and competitive sections of the country; that the railroads and the public rate-making bodies should seek to readjust rates of the country so as to preserve so far as practicable the general relationship of rates existing prior to 1918, with due regard to present and future changes in economic conditions. * * *

In this controversy over valuations and the basing of rates thereon, there has been much discussion to the effect that the public is entitled to fair and reasonable rates. Granted. But that right is no greater than the right of the roads to a fair and reasonable return. Business practice may at times compel a road to take certain business at a loss, but certainly there is nothing in law or equity to compel any of us to serve the rest of us under such conditions. It is repugnant to the Fifth Amendment. Although the property of railroads is devoted to public use, the private property (for it is still private property) so used is not at the mercy of legislative caprice but rests secure under constitutional protection, which extends not to the title only, but to the right to receive just compensation for the services rendered to the public. As was said in *Smyth v. Ames* (1897), 169 U. S. 466, 546-7:

"It cannot be assumed that any railroad corporation, accepting franchises, rights and privileges at the hands of the public, ever supposed that it acquired, or that it was intended to grant to it, the power to construct and maintain a public highway simply for its benefit, without regard to the rights of the public. But it is equally true that the corporation performing such public services and the people financially interested in its business and affairs have

rights that may not be invaded by legislative enactment in disregard of the fundamental guarantees for the protection of property. The corporation may not be required to use its property for the benefit of the public without receiving just compensation for the services rendered by it. How such compensation may be ascertained, and what are the necessary elements in such an inquiry, will always be an embarrassing question. * * *

"We hold, however, that the basis of all calculations as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public. And in order to ascertain that value, the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stock, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by statutes, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value of the property. What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth."

Subject to the Commission's review, the fixing of rates is, therefore, a business matter between the carriers and the shippers, and if they were given greater freedom of action, they could be trusted to get together and put the rates on a sound, business basis. There is a close interrelation of interest between carrier and shipper and if they were permitted greater freedom in this regard there would be a better understanding on the part of each of the problems of the other. Some of the carriers have established public-service departments for the purpose of meeting this need of a closer contact, with excellent results. Much could probably be done to correct this situation if the carriers that have not done so would establish like service. Failure to appreciate this interdependence has been a great contributing cause to the railroad problem as it has grown from year to year for many years past. In considering the relation between rates and the cost of transportation, we must not overlook the fact that the cost of capital is just as much a part of the cost of transportation as is the cost of labor or material or supplies or any other element, and any adjustment of rates must give the cost of capital due consideration. Much refunding of capital obligations and the raising of considerable new capital (though far less than should have

been raised) have taken place during the past few years at rates 50% or more in advance of what the cost to the carriers was previously. In justice, the rates allowed should give this recognition.

Nowadays we all take it for granted that regulation of transportation so that rates shall be fair to all concerned, so that service shall be sufficient and without discrimination, so that no person or locality shall prosper at the expense of another is just as much a governmental function as taxation or any other matter where the welfare of all the people is at stake. But private management is entitled to prerogatives that must accompany any private business to make it successful. Transportation by railroads privately operated is subject to the same general business principles and conditions that appertain to other private industry, and too rigid public requirements are bound to be injurious. Injury to the railroads is injury to the public and more directly than is generally realized. Therefore, while our policy toward the carriers, as exercised through governmental agency should be definite and permanent, so far as possible, it should at the same time permit sufficient flexibility of administration to allow control of rates and other transportation matters to anticipate changed economic conditions. Instead of attempting to adjust rates to a level aiming to hew as close to the line of confiscation as would stand the test of a court review, it would seem more consistent with sound policy to permit the carriers to earn a surplus in good times, in order that they may be able to reduce rates in bad times, with the hope of encouraging a revival of trade. Again, so long as private enterprise is looked to for the development of transportation facilities, the carriers must be permitted to earn sufficient to make railroad investment attractive. This they cannot do unless they be permitted to earn a surplus in good times sufficient not only to carry them through poor earnings in bad times, one year with another, but also to build up a reserve. This is no more than any commercial enterprise is entitled to.

TESTIMONY RESPECTING THE VALUATION OF THE CARRIERS IN THE 1920 RATE CASE

Mr. Thomas W. Hulme, Vice Chairman of the Presidents' Conference Committee, offered striking testimony before the Interstate Commerce Commission on May 27, 1920, in support of the

carriers' contention that the book values fairly reflected the true values of railway property. In his statements he relied on the work of Bureau of Valuation in so far as it had progressed up to that time.

The statistics supporting the statement were taken from nine tentative valuations and forty-one so-called "preliminary reports." These fifty railroads have an aggregate mileage of 51,853 miles, or approximately 20% of the total in the United States.

The summary shows that the cost of reproduction new plus the value of the lands was 101% of the total investment as reported by these carriers on their own books. In other words, the book values amounted to \$3,158,275,156, while the cost of reproduction new and land was \$3,203,782,543.

To Mr. Hulme's tables, submitted herewith, has been added in each case the ratio of cost new and land to the investment in road and equipment as shown by the balance sheets of the roads.

EASTERN GROUP

Tentative Valuations (2, covering 590 miles of road)

Cost of reproduction new.....	\$58,666,495
Land	4,404,311
	<hr/>
Cost new and land.....	63,070,806
Investment in road and equipment.....	63,610,882
	<hr/>
Ratio of cost new and land to investment...	99.15

Preliminary Reports (16, covering 12,834 miles of road)

Cost of reproduction new.....	\$982,414,387
Land	159,922,636
	<hr/>
Cost new and land.....	1,142,337,023
Investment in road and equipment.....	951,196,372
	<hr/>
Ratio of cost new and land to investment...	120.09

Total for Tentative Valuations and Preliminary Reports

Cost of reproduction new.....	\$1,041,080,882
Land	164,326,947
	<hr/>
Cost new and land.....	1,205,407,829
Investment in road and equipment.....	1,014,807,254
	<hr/>
Ratio of cost new and land to investment...	118.78

SOUTHERN GROUP

Tentative Valuations (4, covering 2,047 miles of road)

Cost of reproduction new.....	\$64,917,232
Land	7,110,675
Cost new and land.....	72,027,907
Investment in road and equipment.....	87,745,178
Ratio of cost new and land to investment...	82.09

Preliminary Reports (10, covering 6,014 miles of road)

Cost of reproduction new.....	\$263,851,408
Land	30,408,728
Cost new and land.....	294,260,136
Investment in road and equipment.....	247,902,158
Ratio of cost new and land to investment...	118.70

Total for Tentative Valuations and Preliminary Reports

Cost of reproduction new.....	\$328,768,640
Land	37,519,403
Cost new and land.....	366,288,043
Investment in road and equipment.....	335,647,336
Ratio of cost new and land to investment...	109.13

WESTERN GROUP

Tentative Valuations (3, covering 2,051 miles of road)

Cost of reproduction new.....	\$98,725,701
Land	8,770,411
Cost new and land.....	107,496,112
Investment in road and equipment.....	193,223,213
Ratio of cost new and land to investment...	55.63

Preliminary Reports (15, covering 28,767 miles of road)

Cost of reproduction new.....	\$1,387,466,289
Land	137,124,270
Cost new and land.....	1,524,590,559
Investment in road and equipment.....	1,614,597,353
Ratio of cost new and land to investment...	94.42

Total for Tentative Valuations and Preliminary Reports

Cost of reproduction new.....	\$1,486,191,990
Land	145,894,681
Cost new and land.....	1,632,086,671
Investment in road and equipment.....	1,807,820,566
Ratio of cost new and land to investment.....	90.28

TOTALS

Tentative Valuations (9, covering 4,688 miles of road)

Cost of reproduction new.....	\$222,309,428
Land	20,285,397
<hr/>	
Cost new and land.....	242,594,825
Investment in road and equipment.....	344,579,273
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Ratio of cost new and land to investment...	70.40

Preliminary Reports (41, covering 47,165 miles of road)

Cost of reproduction new.....	\$2,633,732,084
Land	327,455,634
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Cost new and land.....	2,961,187,718
Investment in road and equipment.....	2,813,695,883
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Ratio of cost new and land to investment...	105.24

Total for Tentative Valuations and Preliminary Reports

Cost of reproduction new.....	\$2,856,041,512
Land	347,741,031
<hr/>	
Cost new and land.....	3,203,782,543
Investment in road and equipment.....	3,158,275,156
<hr/>	
Ratio of cost new and land to investment...	101.44

Summarized valuation figures for many of the roads used by Mr. Hulme in the preparation of the foregoing comparisons are given in the supplement at the end of this Report. These are the more important carriers which have received tentative valuations. Comparisons between cost new and land values and investment in road and equipment for the other roads which were embodied in Mr. Hulme's testimony but which are not in the supplement, here follow:

EASTERN GROUP

Preliminary Reports

	Cost New	Land	Cost New & Land	Investment in Road & Equipment	Miles of Road
Central New England.....	\$15,483,002	*\$1,911,772	\$17,394,774	\$22,342,396	136
Hartford, Conn., West.....	5,037,461	* 669,632	5,707,093	4,386,613	124
Montpellier & W. R.....	1,937,229	75,551	2,012,780	1,124,320	42
N. Y., N. H. & H.....	248,599,023	*71,000,000	319,599,023	195,505,844	1,252
Portland Terminal	5,253,647	2,601,268	7,854,915	5,138,223	23
Terre Haute & Peoria.....	3,445,808 }			{ 6,267,319	138
Vandalia	42,351,590 }	6,060,896	51,858,294	{ 36,366,572	651

* Carriers' Return to Order No. 7.

SOUTHERN GROUP

Tentative Valuations

	Cost New	Land	Cost New & Land	Investment in Road & Equipment	Miles of Road
A., B. & A. System.....	\$25,114,141	\$2,357,076	\$27,471,217	†\$39,255,787	663
Ga. Southern & Florida.....	10,297,657	1,231,456	11,529,113	12,273,374	392
Winston-Salem Southbound	5,428,444	510,655	5,939,099	5,598,558	90

Preliminary Reports

	Cost New	Land	Cost New & Land	Investment in Road & Equipment	Miles of Road
Charleston & West Car.....	\$9,814,315	\$1,875,745	\$11,690,060	\$8,279,563	341
Ga. R. R. & Bk. Inc. Ga. R. R. (Lessee org.)	14,041,901	102,493	14,144,394	5,430,000	301
Gulf & Ship Island.....	9,498,259	1,354,196	10,852,455	14,170,063	308
N. C. & St. L. System.....	56,309,554	4,857,487	61,167,041	42,068,246	1,100
New Orleans Great Northern.....	7,298,789	208,825	7,507,614	16,045,689	243
Southern Ry. in Mississippi.....	4,881,786	564,783	5,446,569	610,656	237

† Investment as of Dec. 31, 1915, after reorganization, taken from I. C. C. statistics.

WESTERN GROUP

Tentative Valuations

	Cost New	Land	Cost New & Land	Investment in Road & Equipment	Miles of Road
New Orleans, Tex. & Mex.....	\$8,865,636	\$141,686	\$9,007,322	\$15,790,645	173

Preliminary Reports

	Cost New	Land	Cost New & Land	Investment in Road & Equipment	Miles of Road
Arizona Eastern (inc. Phoenix & East)	\$12,178,415	\$778,654	\$12,957,069	\$19,227,648	374
Duluth, So. Sh. & Atl.....	19,231,742	939,096	20,170,838	48,197,021	539
Grand Canyon Ry.....	1,365,674	6,267	1,371,941	1,988,785	64
Mineral Range R. R.....	3,230,437	† 113,582	3,344,019	3,317,151	64
Minn., St. P. & S. S. M.....	108,066,929	† 6,634,182	114,701,111	116,953,635	3,144
Northwestern Pacific	37,461,314	† 691,879	38,153,193	65,984,697	506
Oregon Short Line	107,018,378	† 2,666,841	109,685,219	113,094,103	2,129
O. W. R. R. & N. Co.....	123,490,128	†19,857,000	143,347,128	156,642,559	1,999
Spokane, Portland & Seattle....	55,906,902	† 6,093,285	62,000,187	61,266,414	498
Texas & Pacific.....	66,290,979	† 1,127,432	67,418,411	109,250,903	1,853
Trinity & Brazos Valley.....	10,528,256	499,638	11,027,894	11,792,807	303

‡ Carrier's Return Order No. 7.

THE INTERSTATE COMMERCE COMMISSION'S VALUATION FOR THE RATE CASE OF 1920

The rate making section of the Transportation Act of 1920 required the Interstate Commerce Commission to determine the aggregate value of the railway property of the carriers. The Transportation Act became a law February 28, 1920. The rate making section imposes the duty on the Interstate Commerce Commission promptly to initiate rates which would yield, as nearly as may be, a return of not less than 5½% on the aggregate value of railway property. Recognizing that the valuations had not been

completed, the law authorized the Interstate Commerce Commission, in making an immediate determination of aggregate value, to utilize results of the investigation under the Valuation Act so far as such results were available, to give due consideration to all the elements of value recognized by the law of the land for rate making purposes, and to give to the property investment of the carriers only that consideration which under such law it is entitled to in the establishment of values for rate making purposes.

Five months after the passage of the Transportation Act the Interstate Commerce Commission announced that for the purpose of this particular case, the value of the steam railway property of the carriers is approximately \$18,900,000,000. Testimony is introduced in this Report on a later page to show how this valuation was reached.

The increased rate decision itself contains the following:

"While the valuation of the railroads under section 19a of the Interstate Commerce Act is still incomplete, the work has progressed so far that the results are of value and informative in reaching the determination we are now required to make. So far as the work has produced results, either as to particular roads, or as showing general tendencies and principles, we have given consideration thereto. As will appear from examination of our various valuation reports, and from section 19a itself, our investigations under that section are designed to give information as to the original cost of the property, the cost of reproduction new, the accrued depreciation, the amount of the investment, the corporate histories of the properties, the values of the lands, and other values and elements of value, if any.

"We have also before us the investment accounts of the carriers. Since 1907 there have been mandatory regulations by us as to the manner in which the investment accounts should be kept. In the administration of section 20 of the Interstate Commerce Act we have had frequent occasion to investigate, and in many cases to correct, errors apparent in the investment accounts; other errors have been discovered and brought to our attention in the progress of the work of valuation under section 19a.

"The probable earning capacity of the properties under particular rates prescribed by law and the sums required to meet operating expenses, separately and collectively, are indicated in the record.

"There is also evidence which tends to show the amount and market value of the bonds and stocks of the carriers.

"In properly appraising all these elements of value we are mindful of the fact that the carriers are operating units and going concerns. This fact has been given due consideration in the light of the financial history of the transportation system of the United States, as developed by the record and as known to us. The needs for working capital, and materials and supplies on hand have been considered and allowance therefor has been made.

"From a consideration of all of the facts and matters of record, and those which, under section 15a of the Interstate Commerce Act, we are both required and authorized to consider, we find that the value of the steam-railway property of the carriers subject to the act held for and used in the service of transportation is, for the purposes of this particular case, to be taken as approximating the following:

Eastern group, as defined by the carriers...	\$8,800,000,000
Southern group, as defined by the carriers...	2,000,000,000
Western group, as defined by the carriers, including both the western and Mountain-Pacific groups herein designated.....	8,100,000,000
Total	\$18,900,000,000"

Ex Parte 74, Increased Rates 1920, 58 I. C. C., pp. 228-229.

THE TESTIMONY OF CHAIRMAN CLARK

The Honorable Edward E. Clark was chairman of the Interstate Commerce Commission at the time the valuations were made in the rate-case of 1920. Mr. Clark was testifying before a Senate Committee on October 29, 1921, when the discussion shifted to the method employed by the Commission in determining the aggregate value of railway property used in the rate decision of 1920. His testimony in part reads as follows:

Senator Reed: It is a little aside from this hearing, but I think you may answer this question. How did you get at the value of the property? What is the general basis? Is it stocks and bonds; is it the physical value?

Commissioner Clark: Stocks and bonds are not considered at all. The question of capitalization was not thought of. It is the fair value as closely as could be estimated and approximated at that time of the physical property which was devoted to the transportation service. We had a mass of information which we had gathered in our valuation work, which is not in complete form to be given out in the form of reports or findings, and the transportation act specifically authorized us to avail ourselves of that information. We availed ourselves of all the information that we could.

The cost of the property, according to the books of the carriers, and which they urged upon us as representing the value, was something in excess of \$20,000,000,000. The value which we found for the carriers of the country as a whole, for the purpose of that case, was about eighteen and one-half billion, and that included the materials and supplies on hand and reasonable working capital.

Senator Reed: So you made these valuations based upon an investigation you had been conducting, and you were trying to arrive at what was the actual value of the roads, regardless of their stocks, regardless of their bonds and regardless of the book value.

Commissioner Clark: I repeat that we did not regard their capitalization, their stocks, or their bonds in any way whatsoever, and we declined to accept their book value as a basis.

* * * * *

Senator Fernald: I do not recall that you gave the exact figures as to the value you found. I presume it may come to your memory if I repeat the exact value which you found. Was it not \$18,900,000,000?

Commissioner Clark: I think it was.

Senator Fernald: I remember seeing that a few weeks ago, and I think it is important to have it in the record.

Senator Reed: Did that embrace all the roads in the United States?

Commissioner Clark: That is the aggregate property of all the steam railroads in the United States as determined by us for the purposes of the proceeding.

Senator Pomerene: \$18,900,000,000 was the best judgment of the commission after going through all the data that had been gathered during all these years?

Commissioner Clark: Yes, sir.

Senator Pomerene: That should set at rest the charge that there is nine billions of water in the railroads now.

Senator Jones, of New Mexico: Does that figure include the percentage arising from the increase in the value of materials and property in recent years, since the roads were constructed?

Commissioner Clark: No; it does not attempt to equate the values. The principal figures that we used in our value are as of 1913 and 1914. We fixed the price units on a given railroad valuation as of June 30, 1914. Those price units were, we think, accurate, and they were based upon experiences of a series of years in the past up to that date, and the prices then prevailing, for the determination of what was up to that time the normal price for fixing the value of a box car, a piece of track, or anything else.*

RATE DECISION OF 1922

In the rate decision of the Interstate Commerce Commission handed down May 16, 1922, reference was made to the valuation found in 1920. The Commission then stated:

"In the instant proceeding there is little of record which goes directly to the subject of value. There has been a general acceptance by carriers and shippers of the value taken in our former determination as an appropriate basis for the purposes of the present proceeding. The respondent carriers have not attempted to show that that value should be increased, other than by appropriate consideration of the subsequent increments to the transportation plant. We have before us deductions made by certain of the State commissions and shippers, based upon the results of the valuation work under section 19a of the interstate commerce act so far as announced, and also computations based upon the market value of outstanding stocks and bonds.

"More than 20 months have passed since our former determination, and in that period the valuation of the railroads under section 19a has gone forward. *The work is still incomplete, but has progressed to such an extent that we may accept the results with fuller assurance, both as to particular roads and as showing general trends and principles (italics ours).* In our

* Hearing before Committee on Manufactures, Senate Report, pp. 51 seq.

administration of various sections of the act, and in our certification of standard return for the purposes of the Federal control act, we have had occasion to make further investigation and corrections of investment accounts of the carriers.

"The various other values and elements of value, as set forth in 'Increased Rates, 1920, supra,' pages 228-229, have been re-examined in the light of the present record and the requirements of section 15a. *We find no present reason to disturb the value taken by us in that proceeding as approximating the sums there stated, except to the extent that subsequent additions to or withdrawals from the property in service, including materials and supplies and working capital, and further depreciation, make adjustment necessary (italics ours).*"*

CHICAGO, ROCK ISLAND & PACIFIC RAILWAY VALUATION

The Chicago, Rock Island & Pacific Railway Company is the only company which to date has officially presented to its stockholders a comparison between the tentative valuation placed upon the company's properties by the Interstate Commerce Commission and the outstanding capitalization. For this reason it is considered desirable to incorporate this comparison in this study.

The value of the carrier property as of the valuation date of June 30, 1915, includes the Chicago, Rock Island & Pacific, the Chicago, Rock Island & Gulf and the Morris Terminal. It excludes valuations of leased lines which are not controlled through the ownership of the entire capital stock, that is, the Keokuk & Des Moines, Peoria & Bureau Valley and White & Black River. The figures as announced by the Commission are as follows:

Carrier Property	\$335,539,013	
Non-carrier Property	5,745,895	
	<hr/>	\$341,284,908
Deduct: Values of leased lines mentioned above	\$5,814,958	
Cash and Materials on Hand June 30, 1915.....	9,022,288	
	<hr/>	14,837,246
Remainder, representing physical property owned directly or through stock ownership, as of June 30, 1915		326,447,662
Add: Additions and betterments July 1, 1915, to June 30, 1921	36,374,458	
Cash and materials June 30, 1921.....	25,455,222	
	<hr/>	\$388,277,342

* Cf. I. C. C. No. 13293, Reduced Rates, 1922, 68 I. C. C., pp. 684-685.

LIABILITIES

June 30, 1921, according to Company's books	
Long term debt	\$234,505,515
Loans and bills payable.....	14,930,000
Preferred Stock	54,557,989
<hr/>	
Total capital liabilities ahead of Common St.	\$303,993,504
Common stock outstanding	74,482,523
<hr/>	
Total capital liabilities	378,476,027
<hr/>	
Amount by which minimum value as found by Commission exceeds total capital liabilities as of June 30, 1921.....	\$9,801,315
<hr/>	
Amount of equity represented by Common Stock (difference between property values of \$388,277,342 and total of senior obligations)	\$84,283,838
Same per share of \$74,482,523 of Common Stock.....	\$113.16

While this valuation refutes any charge of overcapitalization of the Chicago, Rock Island & Pacific, the officers and directors of that company nevertheless regard the valuation as being much less than the actual value of the property and have filed the protest provided for in the law in the hope that upon a hearing the Commission will substantially increase the valuation.

A COMPARISON OF FINAL VALUE WITH REPRODUCTION COST

As elsewhere stated in this report, the final value as determined by the Commission is obtained after taking into consideration the cost of reproduction new and less depreciation, cost of carrier lands, appreciation, depreciation, going-concern value, working capital, materials and supplies and all other matters which appear to have a bearing on the values to be reported.

The figures are reported on the basis of the following classification of property:

1. Owned and used
2. Used but not owned
3. Owned but not used

The Commission has not yet made public an analysis of the methods by which it has reached the determination of final value, but it would appear that to the cost of reproduction less depreciation was added the present value of lands, excluding excess costs of acquisition of same, materials and supplies and cash on hand. What, if any, allowance for appreciation or going-concern value

is made, does not appear, but from the following figures the allowance is evidently a very minor consideration.

For the sake of simplicity the figures do not cover the entire systems named but only the properties wholly owned and used. In the case of the Rock Island, for example, no allowance is made for properties classified by the Commission as owned but not used, such as the Choctaw, Oklahoma & Gulf Railway and the St. Paul & Kansas City Short Line, nor for the properties used but not owned.

	Cost of Reproduction New	Cost of Reproduction Less Depreciation	Present Value of Lands, Working Capital, etc.	Total of Columns 2 and 3	Final Value
Chicago & Eastern Illinois..	\$70,731,092	\$53,385,834	\$8,946,545	\$62,332,379	\$64,612,109
Chicago, Ind. & Louisville...	23,119,336	22,938,669	3,424,158	26,362,727	27,270,223
Chicago, Rock Island & Pac.	254,164,621	199,974,141	51,064,205	251,058,246	251,809,983
Florida East Coast.....	43,515,318	38,669,822	8,011,072	46,680,894	46,931,947
Maine Central	46,879,763	35,624,288	6,464,045	42,068,333	44,030,506
N. Y., Ontario & Western...	37,481,743	28,902,147	3,654,011	32,556,153	34,495,193
N. Y., Phila. & Norfolk....	11,466,512	8,549,839	2,206,533	10,756,372	10,976,927
St. Louis Southwestern.....	28,622,627	21,833,914	4,389,232	26,223,146	26,716,924

USES OF VALUATION

As hereinabove stated, the Commission's valuation, even though accepted by the carriers, is declared by the Act to be *prima facie* evidence only of the value of the property. Although not the sole measure of the value, therefore, of the property of the carrier, the final value will be treated as of great authority in any proceedings wherein the question of the value of the property is raised. It seems important, therefore, to enumerate the principal uses to which the valuations are expected to be put.

Under Section 15a of the Interstate Commerce Act, as amended by the Transportation Act, 1920, the Commission is required to prescribe just and reasonable rates under which the carriers may earn an aggregate net railway operating income equal, as nearly as may be, to a fair return on the aggregate value of the railway property used in the service of transportation. The final value will be used by the Commission as a basis for the rates it is thus directed to prescribe. As a result of the rates based on such values, the amount of earnings that may exceed the percentage of fair return fixed by the Commission will be determined for the purpose of recapturing the excess.

The Transportation Act requires the Commission to prepare and adopt a tentative plan for the consolidation of the railway

properties in the United States into a limited number of systems, the par amount of the capitalizations of which is not to exceed the value of the consolidated properties as determined by the Commission under the authority of the Valuation Act.

The final value so fixed is to form the basis for the rentals of property by one carrier to another and the basis of payment for joint use of facilities.

With the Commission's approval, reserve and depreciation funds are authorized by the Transportation Act to be set up and additions that may be made in any year will depend upon these final values, as the Commission is authorized to fix the percentages of depreciation of value that the carrier shall use.

It appears to be the fair implication of the Transportation Act that the Commission will give much consideration to the values of the properties as thus fixed in determining the adequacy of the security for loans to the carriers authorized by that Act.

It is expected that the valuations when completed will be largely used in connection with appraisals of the properties for purposes of taxation and that the result may be greater uniformity of taxation in the several States, a consummation devoutly to be wished.

VALUATION AND RAILROAD CREDIT

Although a railroad is a private property, as is elsewhere stated, it is nevertheless a public utility and subject to governmental regulation of rates. This power of the government to regulate rates is a power to affect earnings, which in turn affect the market price of the securities of the railroad,—the barometer of the railroad's credit. The return the carrier is entitled to on the fair value of the property is as much under the protection of the Constitution as the amount that it should receive if it were required to dispose of its property to the state for public purposes, and such fair value is the value that would be determined by the ordinary and usual rules.

It was apparent long before this country became involved in the European war that the diminishing credit of the carriers would not enable them to extend transportation facilities to keep pace with our development, industrially and otherwise, as in general they were unable to raise new capital for the purpose of

expansion except at prohibitive rates. One of the main things that it was hoped would follow the passage of the Transportation Act, 1920, was the restoration of railroad credit, and that hope has been partly realized. As an aid in the restoration of credit, the Act provides for consolidations of railroads and values found by the Commission were to govern.

As to the claim from some quarters of overcapitalization, it may well be that in some instances where overcapitalization may have occurred, it is the direct result of the policy of not granting sufficient rates to enable the carrier to pay out of earnings for expenditures properly chargeable to earnings, so that at times the carrier has been forced to meet these expenditures through the use of capital obligations. Had there been always a true and uniform method of accounting, reasonable earnings, a balanced capitalization, the difficulties of valuation would have been much less. It is a difficult matter to distinguish between reasonable rates, rates that are less than reasonable and rates that are more than reasonable. All these things have had their effect on the credit of the carriers.

From the reports of tentative valuation thus far submitted by the Commission, however, it would appear, not only that the roads are undercapitalized, but that their real value is so much in excess of their outstanding capital obligations that the result must be a salutary effect on their credit.

